FIRMWARE RELEASE NOTES

FLARM 6.01 Firmware

Platforms: Classic FLARM only
Build: 7571
Release Date: 18.3.2015
Next recommended update: Yearly
Expires: March 2017

Applicability

This is a critical bugfix release. It affects all devices by LX Navigation (Red Box, Mini Box, etc.) and LX8000 devices by LXNAV. Product codes LX06, LX06_FR, and LX_IGC08 must update. Other (Classic) devices are unchanged.

Compatibility

Fully compatible with 6.00.

Changes since 6.00

Fixes

- Device ID for radio communication was computed incorrectly on some devices if configured to automatic. Only LX06, LX06_FR and LX_IGC08 devices are affected.
FLARM 6.00 Firmware

Platforms
Classic FLARM and PowerFLARM devices

Build
7560

Release Date
13.3.2015

Next recommended update
Yearly

Expires
March 2017

Applicability
All FLARM, PowerFLARM and FLARM-compatible devices must upgrade.

Compatibility
Please note that firmware version 6.00 is not compatible with previous versions. This means that FLARM, PowerFLARM and 3rd party devices with version 6.00 will not see non-updated devices, and vice versa.
As in all previous updates, older versions will automatically seize operations and display an error message on March 31 2015 as in previous updates.

The Dataport (serial interface) is fully compatible; therefore remote displays, moving maps, etc. may not require an update.

Changes since 3.41 / 5.14

Enhancements
- Increased position accuracy in radio protocol
  For increased performance and less nuisance alarms.
- Increased maximum range in radio protocol to >300km
  New PowerFLARM devices have significantly higher transmit power and receiver sensitivity, requiring support for increased maximum range.
- Added opt-out option for ground tracking (“no track”). If set, receiving ground stations do not process or store position data of aircraft.
  Due to increased popularity of using FLARM for flight tracking and to respect privacy concerns.
- Stealth mode improved to provide increased situational awareness and prevent unfair advantages during competitions.
  Modifications based on IGC and other recommendations

New behavior:

<table>
<thead>
<tr>
<th></th>
<th>Target is more than 2km / 300m vertical away</th>
<th>Target is closer than 2km / 300m vertical away</th>
<th>Target is nearby / collision alarm detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target ID</td>
<td>Not available</td>
<td>Anonymous ID</td>
<td>Anonymous ID</td>
</tr>
<tr>
<td>Relative position</td>
<td>Not available</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>Relative altitude</td>
<td>Not available</td>
<td>Available with noise</td>
<td>Available</td>
</tr>
<tr>
<td>Climb rate</td>
<td>Not available</td>
<td>Not available</td>
<td>Available</td>
</tr>
<tr>
<td>Track</td>
<td>Not available</td>
<td>Not available</td>
<td>Available</td>
</tr>
<tr>
<td>Speed</td>
<td>Not available</td>
<td>Not available</td>
<td>Available</td>
</tr>
</tbody>
</table>
Introducing alert zones marked by ground stations to notify pilots of active parachute dropzones, RC / RPAS / UAS flying areas or similar.

- RF frequency band adjusted for South America. All (North-) American units can operate in South America.
- Improved Glider tow detection for less nuisance alarms.
- Record more diagnostics information in IGC files
- Configured Data Port protocol version is now stored permanently in the device
- PowerFLARM: Mode-C/S warnings can now be silenced using $PFLAC,S,PCASBEEP,0
- PowerFLARM: Audio OUT volume can now be adjusted using $PFLAC,S,AUDIOVOLUME,<percent>
- PowerFLARM: Config file will now be read from CF<C|P><SSSSS>.TXT in addition to FLARMCFG.TXT. This is useful to quickly deploy a large base of units
- PowerFLARM: Startup log will now be written to file PF<C|P><SSSSS>.TXT
- PowerFLARM: GPS signal strength will now be recorded in IGC files
- PowerFLARM: Updated grandfather feature licenses
- PowerFLARM: Reduced nuisance warnings for gliders with ADS-B Out
- PowerFLARM: Alarms will now be issued even when outside the configured FLARM range
- PowerFLARM: Improved alarm suppression when on ground
- PowerFLARM Portable: Audio is disabled when operating on batteries

Fixes

- PowerFLARM: Fixed reset loop while removing obstacle database from memory.
- Classic FLARM: IGC F-record fixed
- Fixed some Data Port sentences
- Fixed TRX devices restarting in flight
- Geography for Israel frequency use corrected
- PowerFLARM: Fixed IGC validation issue in 3.41